



# HEALTH INSURANCE COVERAGE AND THE UNINSURED IN NEW HAMPSHIRE



## *Results from the New Hampshire Health Insurance Coverage and Access Survey*

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# HEALTH INSURANCE COVERAGE AND THE UNINSURED IN NEW HAMPSHIRE

*Results from the  
New Hampshire Health Insurance Coverage and Access Survey*



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## ACKNOWLEDGEMENTS

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The Department of Health and Human Services extends its appreciation to Governor Jeanne Shaheen for her support of this initiative. We commend her for her unwavering commitment to the health of all the citizens of our State.

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The Department wishes to extend its appreciation to the members of the District Health Councils and the Executive Councilors for their recommendation and support to conduct the New Hampshire Insurance Coverage and Access Survey.

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The Department acknowledges Macro International, Inc., who conducted the survey.

## ***Why was a Survey of New Hampshire Insurance Coverage Conducted?***

In 1995, the New Hampshire Department of Health and Human Services created a statewide Health Care Planning Process, the goal of which was to establish a State Health Plan to promote improvement in the health status of the state's citizens. One of the principal documents to emerge from this planning process - developed through seven community councils, 22 focus groups, 18 town meetings, symposia and a number of reviews of planning reports - was *The New Hampshire Health Care System: Guidelines for Change*. This document provided a series of 27 recommendations for action that reflected the concerns of the citizens of New Hampshire.

While the vision depicted in the Guidelines for Change was broad, the recommendations for initial action were specific. They focused on developing timely and reliable information and data which would allow the state to evaluate the need for, and the benefits and costs of, public policy changes. Recommendation #2 of Guidelines for Change focused on the importance of reliable and timely New Hampshire specific information on the uninsured and underinsured to track the effectiveness of the changing market in addressing health care needs.

This recommendation served as the motivation for the New Hampshire Health Insurance Coverage and Access Survey (NH - HICAS), a telephone survey of New Hampshire residents under the age of sixty-five designed to understand health insurance coverage, access to medical care, and general medical needs. The results from this survey, of which this report is the first product, provide previously unavailable estimates of uninsurance and the ability to assess under-insurance and the effects of uninsurance and under-insurance, and identify common barriers to obtaining adequate health care coverage. Collection of this information benefits state and local leaders, as the survey was designed to provide estimates at both the state level, and (for a more limited set of characteristics) for different regions of New Hampshire.

The NH-HICAS, while a unique initiative in many respects, is built on work being conducted in other states across the country. In 1993, the Robert Wood Johnson (RWJ) Foundation conducted state specific surveys in Colorado, Florida, Minnesota, New Mexico, New York, North Dakota, Oklahoma, Oregon, Vermont and Washington. A number of states, including Minnesota, Florida and Vermont, have continued to conduct state specific surveys using the RWJ methodology in order to understand the impact of market and policy changes. For the NH-HICAS, both the survey instrument and the sample design were adapted from the RWJ study and modified to meet the needs of New Hampshire.

This report is structured around a series of questions raised through the health planning process by the seven district health councils, the legislature, and the Departments of Health and Human Services and Insurance. It is designed to provide basic answers to these questions. While each section may raise questions regarding policy implications, the intent of the report is to set the stage for work to be conducted cooperatively among the Department's partners.

## ***Why is Health Insurance Important?***

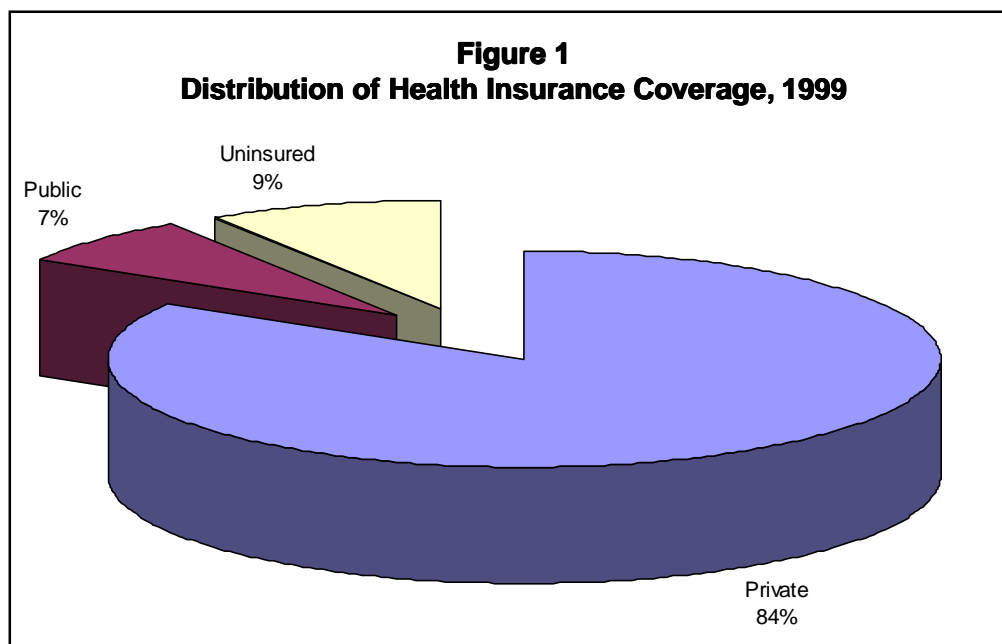
Policy makers are concerned about access to health insurance coverage for a variety of reasons. Most Americans access health insurance through their employer. Nationally, approximately 70 percent of the population has health insurance coverage through their employer. However, changes in the health care market including increases in health care insurance premiums and an increase in jobs which do not offer

benefits, have raised concerns about the erosion of the employment-based system. Some researchers believe that changes in the employer market and the increasing un-affordability of health insurance in the United States are the root cause of recent increases in the uninsured. To many, the changes in the employer market are particularly troubling given the current period of economic prosperity and the real potential for economic downturns.

Individuals without health insurance coverage are a policy concern because they often seek medical services later and receive less care than those who do have coverage. This lack of coverage has implications for individuals, families and communities. Individuals without health insurance potentially face catastrophic costs that can have a significant effect on the economic viability of a family and thus create a negative impact on individuals within that family. Moreover, lack of insurance coverage can have an impact on communities if individuals do not seek medical care when necessary and, as a result, lose workplace productivity. In addition, uninsurance can have an impact on health care providers, as those providers bear some of the costs of providing care to those individuals in need.

### *Who is Covered by Health Insurance in New Hampshire?*

In 1999, approximately 84 percent of the residents of New Hampshire are insured through their employer or through the direct purchase of insurance coverage from an insurance company (Figure 1)<sup>1</sup>. Adults in New Hampshire are more likely to be insured privately (86 percent) than children (78 percent). Compared to the rest of the nation, New Hampshire residents are more likely to be covered privately. A recent national survey indicated that 75 and 69 percent of adults and children respectively were covered privately (Brennan, et. al., 1999, Zuckerman and Brennan, 1999).



Approximately seven percent of New Hampshire residents are covered through publicly sponsored programs, including Medicare, Healthy Kids Gold, Healthy Kids Silver (subsidized and unsubsidized), Medicaid and other state and federal programs. Reflecting the broad reliance on the private insurance system, New Hampshire residents are much less likely to be covered for public programs than is the case for Americans generally. Recent estimates suggest that 20 percent of children and eight percent of adults respectively are covered by public programs nationally (Brennan, et. al., 1999, Zuckerman and Brennan, 1999)

compared to 14 percent and four percent for children and adults respectively in New Hampshire.

**Table 1**  
**The Currently Uninsured in New Hampshire**

**95 Percent Confidence Interval**

	Low End of Range	Estimate	High End of Range
Percent Uninsured <sup>2</sup>	8.4%	9.3%	10.1%
Number of Uninsured <sup>1</sup>	87,112	95,804	104,495

<sup>1</sup> Total number of non-elderly individuals in New Hampshire from the US Bureau of the Census, 1997

<sup>2</sup> Low end and High End of 95% confidence interval computed as the estimate + or - 1.96\* the standard error.

Despite broad coverage through the private sector, approximately 9.3 percent of New Hampshire residents remain uninsured.<sup>2</sup> With an estimated non-elderly population of slightly more than 1 million individuals, this suggests that approximately 96,000 individuals were uninsured as of September 1999. Based on the precision of the estimate, it is 95 percent certain that the true estimate of the uninsurance rate ranges from 8.4 to 10.1 percent of the non-elderly population in New Hampshire or between approximately 87,000 and 105,000 individuals (see Table 1).<sup>3</sup>

### *What Do These Results Suggest About Coverage in New Hampshire?*

Nationally, 17 and 12 percent of adults and children respectively are uninsured, both significantly higher than New Hampshire's rate of nine percent. There are many factors which could contribute to this difference, one of which is New Hampshire's unique position as one of the wealthiest states in the country. New Hampshire is reported to be the eighth highest state in regards to per capita income in the country (New Hampshire Employment Security, 1999). Individuals with higher incomes can more easily access private sources of insurance coverage. That private plans are an even more important source of health insurance coverage for New Hampshire residents than for all Americans may also speak to the general strength of the employment-based system in New Hampshire (and the behavior of both employers and employees).

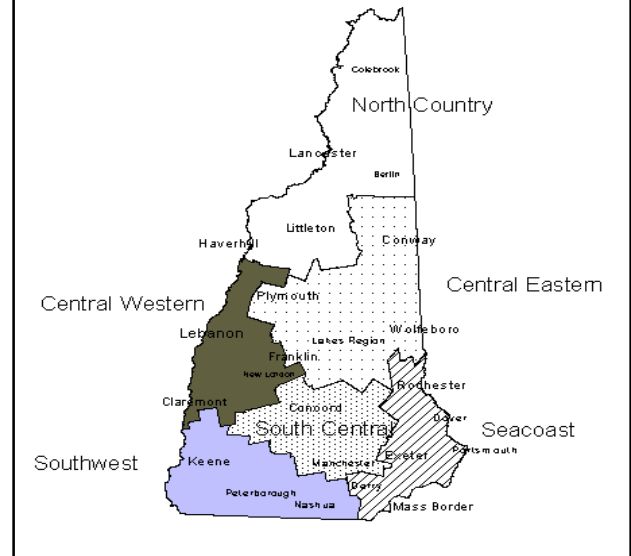
However, national trends suggest that while private plans are still the leading source of health insurance coverage for all Americans, employer-based insurance coverage has begun to deteriorate, particularly for the lower-skilled jobs that are an important factor in the recent decline in unemployment rates. This trend is apparent in New Hampshire as well. The occupations projected to add the most jobs in New Hampshire between 1996 and 2006 were retail related (Elliot, 1999), and these positions are often the least likely to offer any insurance coverage. This raises important policy questions. As New Hampshire grows will the uninsurance rate grow as well? Unemployment is currently at a record low and if there is an economic downturn will the number of uninsured increase substantially? Even if the economy stays strong, will sharp increases in the price of healthcare drastically increase the number of uninsured citizens?

## Are There Regional Differences in Insurance Coverage?

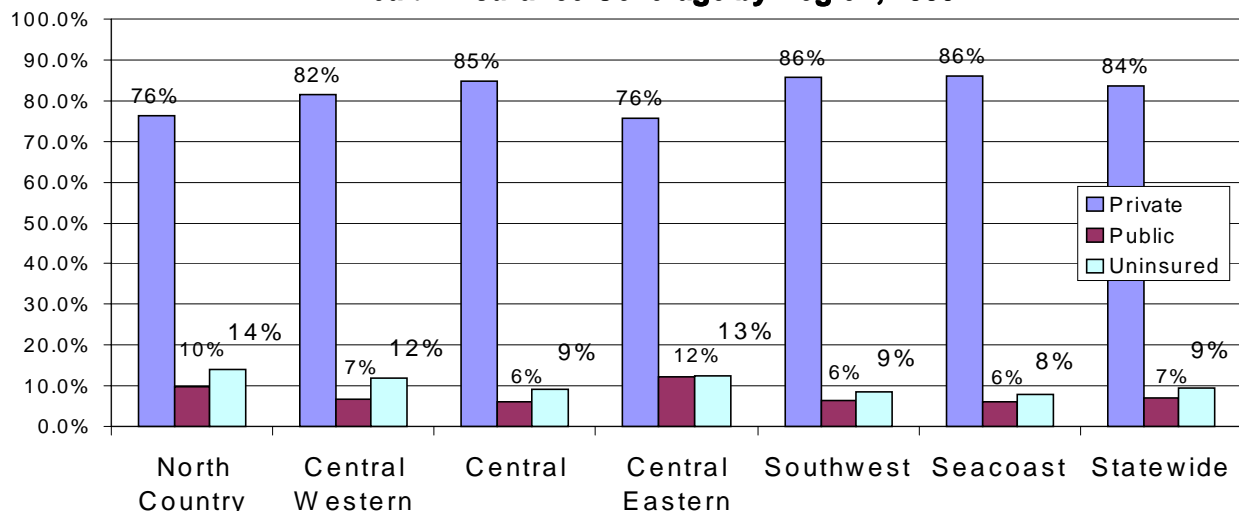
One of the primary purposes for conducting the NH-HICAS was to provide information on regional variation in health insurance coverage in New Hampshire. As a result, the survey was designed to provide information on 24 geographic areas in the state of New Hampshire. These geographic areas – called hospital service areas – were developed by Health Services Planning and Review to capture the patterns of medical care usage across the various regions of New Hampshire. These hospital service areas were grouped together to develop regions. Figure 2 documents these 24 hospital service areas, and how these areas were grouped to develop regions. Other groupings are possible and will be pursued in further work.

With two exceptions, over 80 percent of individuals in all regions of New Hampshire are covered through private insurance coverage (Figure 3). These two exceptions, the North Country (which includes everything North of ‘The Notch’) and Central Eastern New Hampshire (which includes the Mt. Washington Valley and Lakes Region areas) have a significantly lower percentage of individuals covered by private insurance coverage than that of the rest of the state. Individuals in these two areas are also significantly more likely to be uninsured than in the state. Approximately 14 percent and 13 percent of individuals in the North Country and Central Eastern New Hampshire respectively were uninsured.

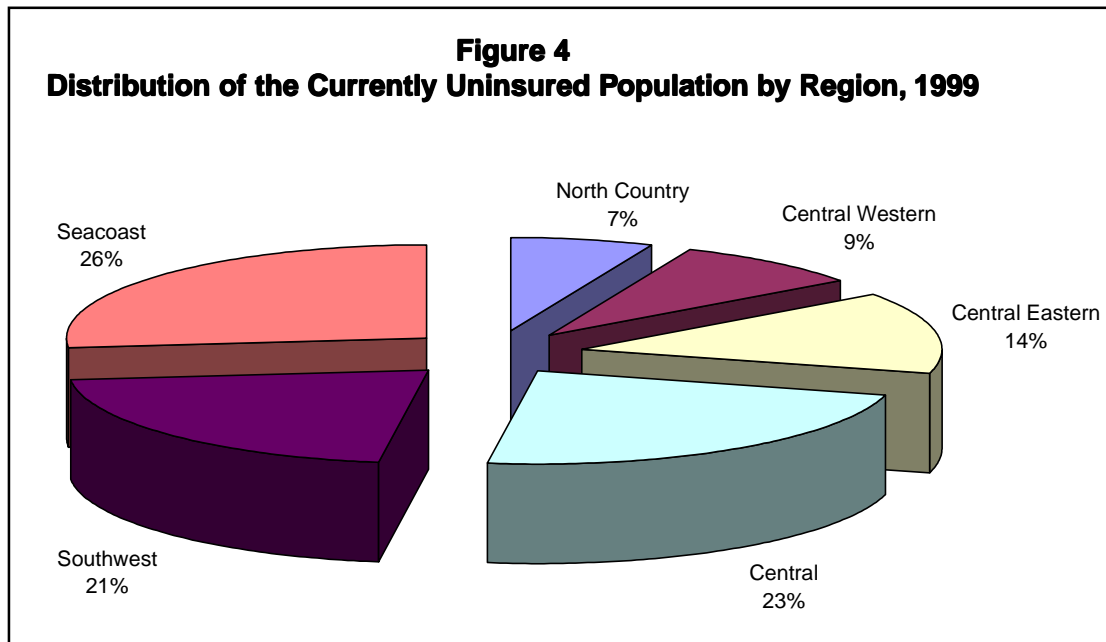
**Figure 2: Regions of New Hampshire**



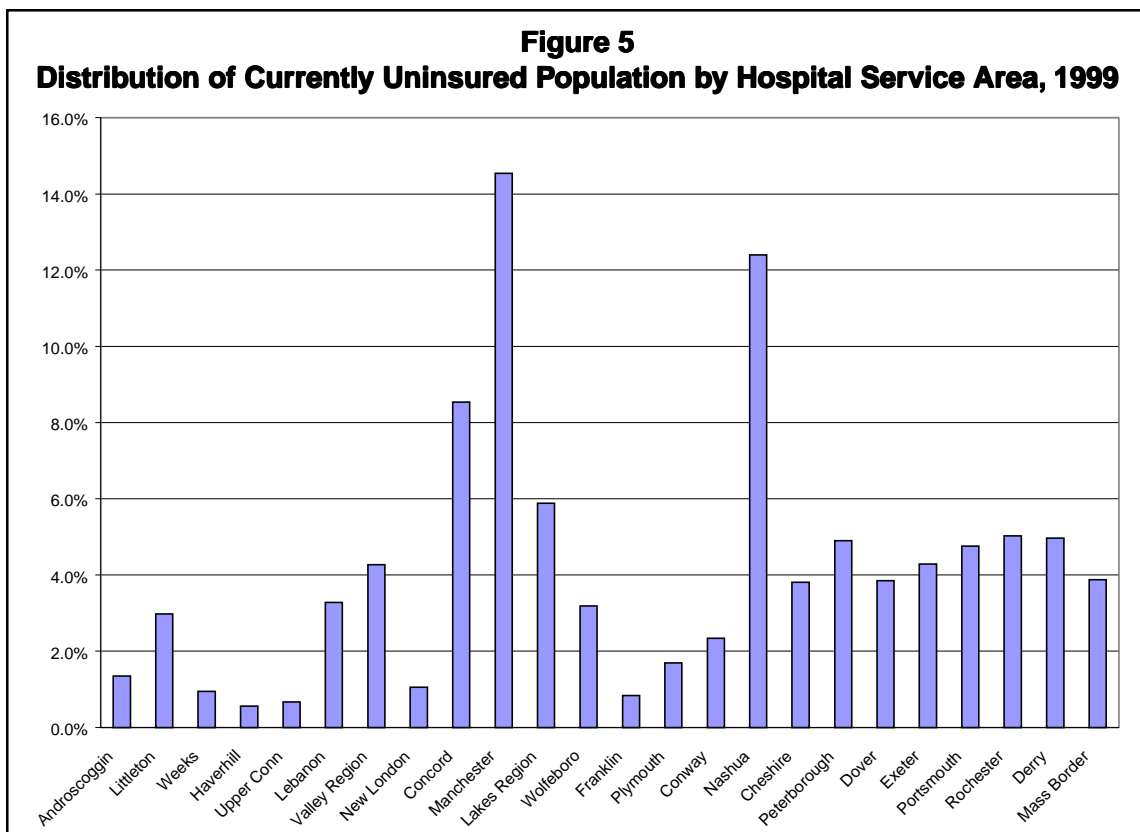
**Figure 3  
Health Insurance Coverage by Region, 1999**



While the uninsured account for a disproportionate share of the population in the North Country and Central Eastern New Hampshire, the more urban areas of New Hampshire – South Central, Seacoast, and Southwestern – account for approximately 70 percent of the total number of currently uninsured individuals (Figure 4) (see page 7). Moreover, slightly more than 34 percent of the uninsured live in three hospital service



areas – those centered in the greater Concord, Manchester and Nashua areas (Figure 5). The more rural areas of the state – the North Country, Central Western and Central Eastern New Hampshire – account for approximately 30 percent of the currently uninsured (Figure 4).





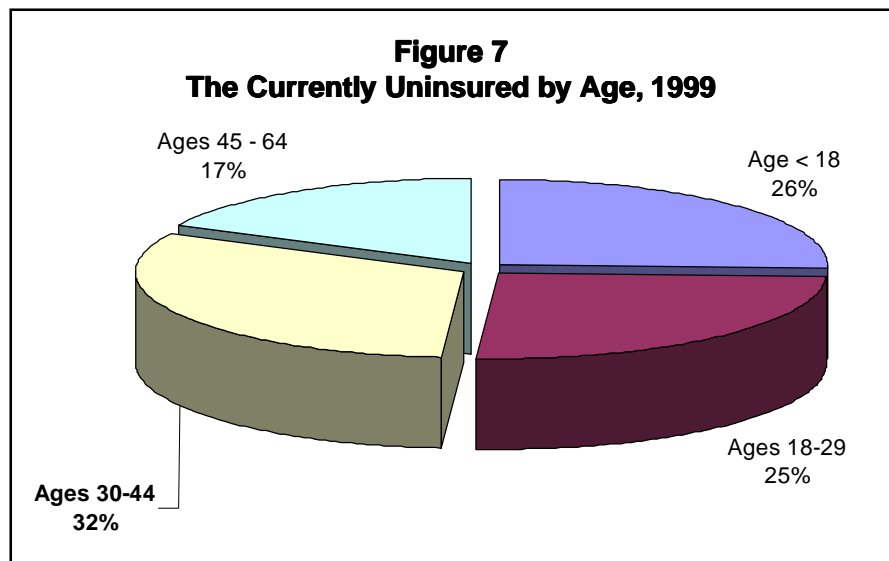
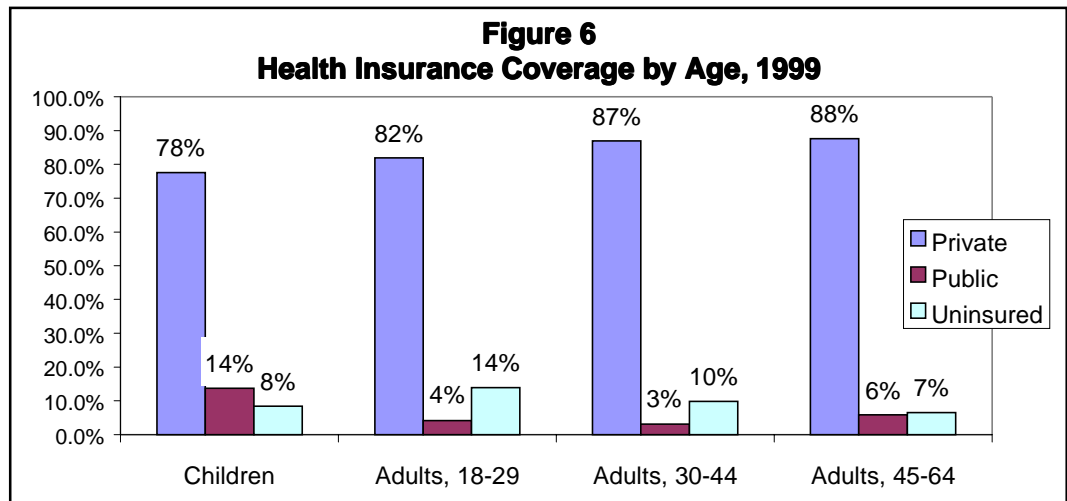
It is not surprising that the number of uninsured individuals is greatest in the Southern part of the state, as this is where most of the population in New Hampshire resides. But an important question is raised by the fact that individuals in the more rural Northern parts of the state are uninsured at a higher rate than in the state generally. Why are individuals in the North Country and the Central Eastern part of the state more likely to be uninsured? Subsequent analyses will explore employers' offer of insurance, individuals' acceptance of insurance, and the various factors affecting these two behaviors, including the market conditions associated with the health insurance market, and benefit packages offered as well as the costs of coverage.

### *Does Insurance Coverage Vary for Children and Adults?*

Among those of different ages, young adults (those ages 18 through 29) have the highest uninsurance rates in New Hampshire (See Figure 6). Approximately 14 percent of 18 to 29-year-olds were currently uninsured compared to a state uninsurance rate of nine percent. Children and those ages 30-44 experienced uninsurance rates roughly comparable to the state average. Individuals between the ages of 45 and 64 were the least likely to be uninsured in New Hampshire.

These trends in uninsurance rates by age are consistent with national trends. Nationally, younger adults are significantly more likely to be uninsured. This may reflect the transitional life circumstances of young adults. For example, young adults no longer have access to public coverage, often are no longer eligible under their parents' plans, and may be working at jobs where health benefits are not offered (Cunningham, 1998). As individuals age, uninsurance decreases as both the types of jobs and employment longevity increase the likelihood that individuals will be covered through an employer.

While insurance rates vary by age, individuals of all ages are uninsured. Figure 7 represents the entire group of individuals currently



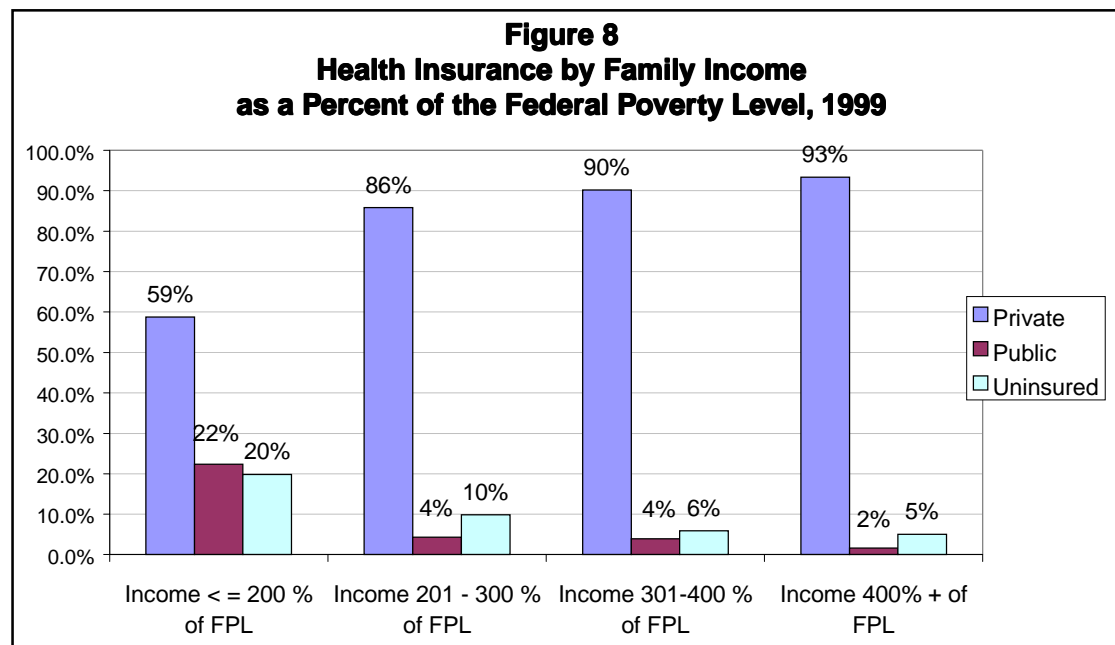
uninsured in New Hampshire. An estimated 74 percent – or approximately 71,000 – of the uninsured are adults, with those ages 30-44 accounting for approximately 32 percent of the uninsured. Adults ages 18-29 – arguably the most vulnerable to uninsurance based on the uninsurance rate – account for 25 percent of uninsured individuals in the state. Children account for approximately 26 percent of the uninsured.

These results suggest that uninsurance is an issue for individuals of all ages, but particularly for adults. Almost three out of four uninsured individuals in New Hampshire are 18 years of age or older. The state has taken significant steps toward covering children through the Healthy Kids programs. However, current initiatives focused on children will not have an impact on the individuals who are the most likely to be uninsured (those 18-29), nor on the individuals who account for the greatest share of the uninsured in New Hampshire (adults generally, and those ages 30-44 specifically).

### *Does Insurance Coverage Vary by Income?<sup>4</sup>*

Lower income families are much more vulnerable to being uninsured than those with higher incomes in New Hampshire. Individuals living in families with incomes less than 200 percent of the federal poverty level (\$27,760 for a family of three) are significantly less likely to have coverage through the private sector than any other group.

While public programs have clearly offset more limited coverage offered through the private sector, individuals in families with incomes less than or equal to 200 percent of the federal poverty level are significantly more likely to be uninsured. Approximately 20 percent of these lower income individuals were uninsured (Figure 8).



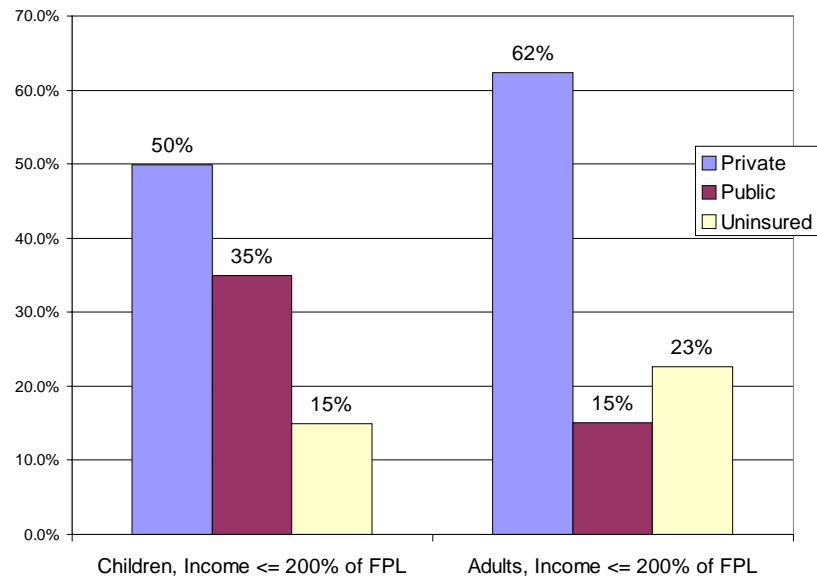
Among those individuals in families with incomes less than or equal to 200 percent of the federal poverty level, adults are the most likely to be uninsured. An estimated 23 percent of adults in families with incomes less than 200 percent of the federal poverty level were uninsured (Figure 9) (*see page 10*). Nationally, approximately 37 percent of adults with incomes less than or equal to 200 percent of the federal poverty level are uninsured. The difference between New Hampshire and the nation appears to be in part a function of the broad private coverage in New Hampshire. Approximately 62 percent of adults with incomes less than or equal to 200 percent of the federal poverty level are insured privately in New Hampshire compared to 44 percent in the nation (Zuckerman and Brennan, 1999).

Despite significant efforts on the part of the state to expand coverage to lower income children, children living in families with incomes less than or equal to 200 percent of the federal poverty level remain uninsured. However, public programs designed to provide children with insurance coverage have clearly made inroads into reducing the number of uninsured children (Figure 9). An estimated 35 percent of children in families with incomes less than or equal to 200 percent of the poverty level are covered through public programs. However, approximately 15 percent of these children were uninsured.

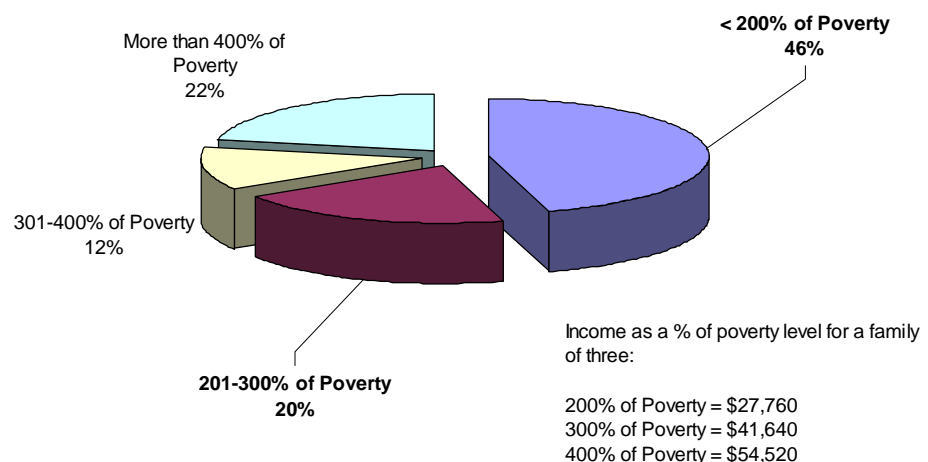
Nationally, approximately 21 percent of children living in families with incomes less than or equal to 200 percent of the federal poverty level are uninsured (Brennan, Holahan, Kenney, 1999). Similar to adults, the difference between New Hampshire and the nation appears to be in part a function of the broad private coverage in New Hampshire. Approximately 50 percent of children with incomes less than or equal to 200 percent of the federal poverty level are insured privately in New Hampshire compared to 40 percent in the nation (Zuckerman and Brennan, 1999).

While those with incomes less than or equal to 200 percent of the federal poverty level are more likely to be uninsured than higher income individuals, individuals of all incomes are uninsured in New Hampshire. Figure 10 provides the distribution of uninsured by family income as a percent of the federal poverty level. Individuals with incomes less than or equal to 200 percent of the federal poverty level

**Figure 9**  
**Health Insurance Coverage by Age for Those with Family Incomes Less Than or Equal to 200% of the Federal Poverty Level, 1999**



**Figure 10**  
**The Currently Uninsured by Family Income as a Percent of the Federal Poverty Level, 1999**



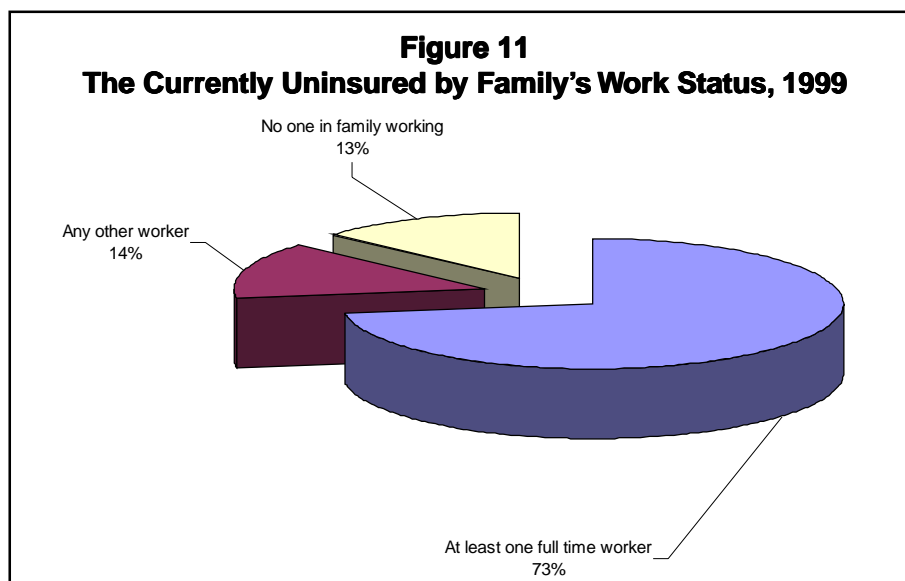
account for 46 percent of the uninsured. An estimated 20 percent of the uninsured are individuals living in families with incomes between 201 and 300 percent of the federal poverty level (approximately \$41,460 for a family of three in 1999). Together, those individuals living in families with incomes less than 300 percent of the federal poverty level account for 66 percent of the uninsured.

### *Are the Uninsured Working?*

To a large extent the uninsured are working. Almost 73 percent of all uninsured individuals have at least one family member who is working full-time (See Figure 11). In addition, approximately 12 percent of uninsured individuals live in families with at least one individual working part-time.

Approximately 85 percent of the uninsured live in families with an individual working full or part-time.

According to recent analyses of employer coverage, low-wage workers, regardless of whether they work in large or small firms are less likely to have employer coverage than those who are better paid (O'Brien and Feder, 1999). The first step in understanding the role of employer-based insurance is to understand the work status of the uninsured in New Hampshire which is addressed below.



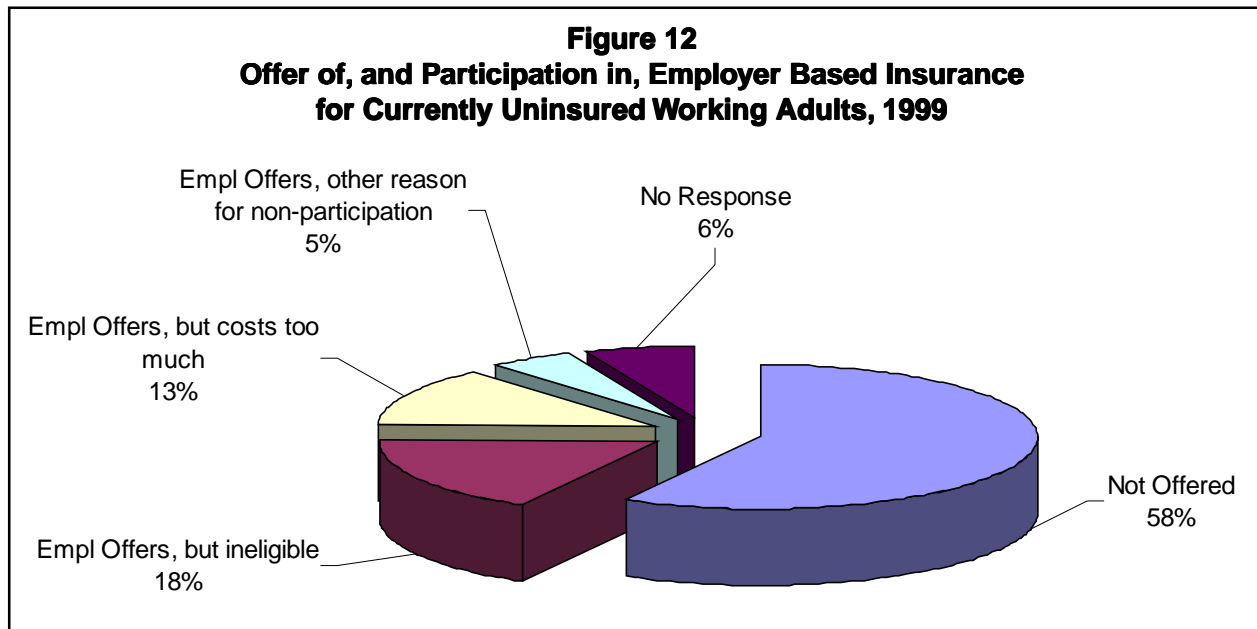
### *Do the Uninsured Have Access to Employer-Sponsored Insurance?*

Approximately 58 percent of working uninsured adults indicated that they were working in firms that did not offer insurance coverage (see Figure 12) (*see page 12*). However, almost 72 percent indicated that they were either not offered insurance coverage, or were ineligible for that coverage as a result of the length of their employment, the part-time nature of their work, or as a result of medical issues which restricted their access to employer-based insurance. Most uninsured individuals in New Hampshire reported little access to employer-based insurance.

Given that such a large share of the uninsured are employed, it is important to determine why these individuals do not have access to, or do not participate in, employer-based insurance. According to a recent analysis of national survey data, almost 70 percent of the uninsured worked in firms that did not offer insurance coverage (Thorpe and Florence, 1999). And for those who were offered insurance, a significant share were ineligible to participate because of medical conditions or the specifics of their employment including length of employment or number of hours worked. For those uninsured who refused coverage when offered, the single most important factor was the cost of that coverage.

Subsequent analyses will assess the extent to which working uninsured individuals are more likely to work in firms or sectors of the economy that are less likely to offer coverage or are self-employed and have difficulty accessing coverage for other reasons. Important policy questions that will be answered in subsequent work include: Why are uninsured individuals ineligible for plans and what implications does this have for current policies regarding insurance coverage? In addition, from a policy perspective it is important to understand the issue of the costs associated with participation in employer-based insurance.

**Figure 12**  
**Offer of, and Participation in, Employer Based Insurance**  
**for Currently Uninsured Working Adults, 1999**

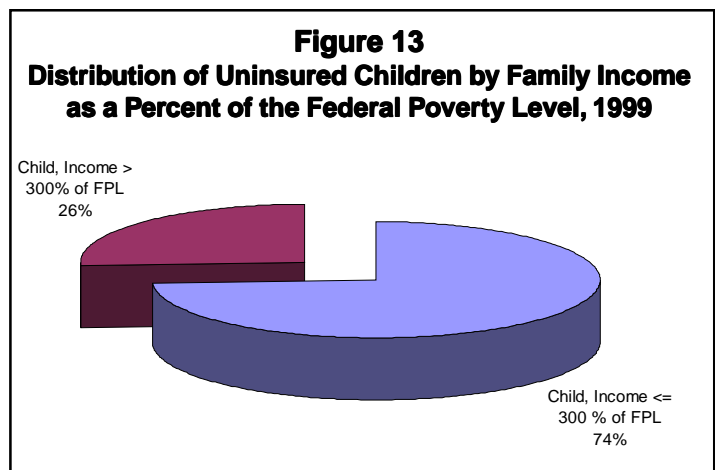


### *What Share of the Uninsured Population Represents Children Who Might be Eligible for Existing State Programs?*

In 1999, New Hampshire expanded public programs to include all children with incomes up to 300% of the federal poverty level through the state's Medicaid program – Healthy Kids Gold - and through the New Hampshire Healthy Kid's Corporation. Still, both nationally and within New Hampshire, there is growing concern that these expansions in coverage have not resulted in significant increases in enrollment. There are many reasons for this. Parents may be unaware of their children's eligibility, may not believe that insurance is necessary because they have access to basic medical services through safety net providers such as community clinics, or may not enroll their children because of the administrative difficulties associated with eligibility determination and enrollment.

Looking more closely at this eligible but not enrolled population, Figure 13 provides information on the percentage of uninsured

**Figure 13**  
**Distribution of Uninsured Children by Family Income**  
**as a Percent of the Federal Poverty Level, 1999**



children whose families have incomes less than or equal to 300 percent of the federal poverty level, a rough approximation of current state eligibility rules with regards to children. Approximately 74 percent of uninsured children live in families with incomes that would qualify them for existing state programs. Assuming that approximately 26 percent of the uninsured are children, this suggests that there are approximately 18,500 children potentially eligible for publicly sponsored coverage who are not participating.

As work on the subject of uninsurance for children continues, it will be important to continue efforts to streamline the eligibility determination process, encourage parents to enroll eligible children, and explore other options that encourage enrollment.

### *How Many Adults with Incomes Less than 200 Percent of the Federal Poverty Level (\$27,760 for a Family of Three) are Uninsured?*

In response to changes in the employer-based insurance market, some states have developed strategies to cover lower-income adults. A few states, including Oregon and Tennessee, have expanded their Medicaid programs to offer full coverage to uninsured individuals or families up to certain percentages of the federal poverty level. In Massachusetts, adults with incomes up to 200 percent of the federal poverty level are eligible for subsidies for employer-based coverage if they work for a small employer. Washington State provides subsidized coverage to all individuals with incomes less than 200% of the federal poverty level through its Basic Health Plan.

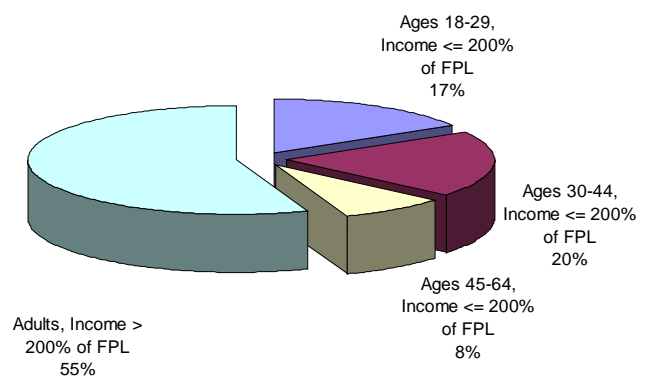
New Hampshire SB 183 provided the Department of Health and Human Services, the legislature, health care providers, business leadership, and managed care organizations, with the mandate to begin investigating uninsurance for lower-income adults in New Hampshire. To understand what populations would be eligible, this report looks at the distribution of uninsured adults by income. Following those states that have expanded coverage to adults, the report looks at those adults with incomes less than or equal to 200 percent of the federal poverty level and others.

Approximately 45 percent of uninsured adults live in families with incomes less than or equal to 200 percent of the federal poverty level (Figure 14). Given that an estimated 74 percent of the uninsured are adults, this suggests that approximately 32,000 uninsured adults live in families with incomes less than 200 percent of the federal poverty level. Moreover, a program targeted at these uninsured adults would reduce the number of uninsured by approximately one third.

These results provide an indication of the magnitude of the population of adults who would be potentially eligible for a program similar to those developed in other states across the country.

Further work will explore the characteristics of these adults, their access to services, and the implications of uninsurance both to the individuals themselves as well as to their families and the communities where they live.

**Figure 14**  
**Distribution of Uninsured Adults by Family Income as a Percent of the Federal Poverty Level, 1999**



## *Policy Implications and Future Work*

In all subsequent work, it will be important to understand how to ensure that the major role played by the private sector in health insurance coverage in New Hampshire is maintained. First, it will be important to monitor trends in employment based insurance, as national studies suggest that the employer-based system of coverage is eroding, particularly for lower income individuals. Moreover, given that some children and adults with incomes less than or equal to 200 percent of the federal poverty level are ensured privately, it is important to explore the potential for building on the broad private coverage in New Hampshire for this population.

The results of this report provide additional support for ongoing state initiatives including efforts to enroll children who are eligible for existing state programs. Approximately 26 percent of the total pool of uninsured individuals are children, of whom an estimated 74 percent are children living in families with incomes less than the current eligibility criteria for existing state sponsored health insurance coverage programs. Thus, these estimates suggest that there are potentially 18,500 children who would benefit from continued outreach efforts. If all children who were eligible for existing state programs enrolled, the number of uninsured would be reduced by almost 20 percent.

Future work will explore this eligible but not enrolled population. More in-depth simulation of state and public-private sponsored programs for those with lower incomes will provide communities and policymakers with more precise information on the characteristics of the eligible but not enrolled population and potential explanations for why these individuals are not enrolled.

These results also support the initial efforts undertaken by the subcommittee of the Healthy Kids Corporation mandated by SB 183 to provide recommendations regarding uninsured adults. These results suggest that the greatest share of the uninsured are adults. Moreover, 45 percent of uninsured adults are living in families with incomes less than 200 percent of the federal poverty level – an estimated 32,000 individuals. If these 32,000 individuals were able to access employer- sponsored coverage, the number of uninsured could be reduced by as much as 33 percent. Further work developed through the subcommittee will explore this population of individuals more carefully, with an eye towards understanding access to medical services, as well as access to insurance coverage through private market mechanisms.

Consistent with national results, most uninsured individuals in New Hampshire live in working families but indicate that they do not have access to employer- based insurance coverage. The majority of those who do not have health insurance are living in families with at least one full-time worker. Approximately three out of four of the working uninsured are either not offered coverage through their employer or believe they are ineligible for coverage offered by an employer.

Given that such a large share of the uninsured are living in families with at least one person who is working full-time, it will be very important to develop more information on why these working individuals do not have access to, or do not participate in, employer-based insurance. Future work will focus on employer-based insurance in New Hampshire. One component of this work will focus on the offer of insurance in different industries and firms in New Hampshire where the uninsured are most likely to work.



An important next step in this work will be to assess individuals' access to care in New Hampshire, as this provides another important measure of vulnerability. This work will assess access to a medical home and the utilization of medical services, as well as the role of community clinics, hospitals and other safety net providers in providing free or subsidized care to the uninsured in New Hampshire. To meet the needs of the subcommittee mandated by New Hampshire SB 183, attention will initially be focused on low income working adults.

Future analyses will assess other issues of policy interest with New Hampshire specific information. For example, while this report focuses on insurance coverage at the time of the survey, further work will also assess those individuals who have been uninsured in the previous year, as well as the length of time individuals are uninsured. Other planned evaluations include more focused assessments of insurance coverage, and the need and access for specific groups in New Hampshire including children, women, and working adults.

### *What were the Basic Methods Used in Conducting the Survey?*

The NH-HICAS was a random survey of the non-elderly population of New Hampshire residents conducted by the survey research firm Macro International, Inc. Interviews were conducted in English, and one adult who was most knowledgeable about insurance in the family, was asked the survey questions for him or herself as well as for other family members. Between June 16, 1999 and September 1, 1999, approximately 11,781 family-level interviews were conducted, representing approximately 28,263 persons. A random sample of families in each hospital's market area – called a Hospital Service Area (HSA) – was interviewed.<sup>5</sup>

The overall response rate for the survey, 76 percent, was excellent.<sup>6</sup> In addition, a significant share of those who initially refused to participate later agreed to be surveyed. The refusal conversion rate was 22 percent, or approximately twice Macro International's average rate. This is a good indication that Macro International Inc. was able to convey the importance of this survey to New Hampshire residents in phone calls made subsequent to initial refusals.

A variety of methods were used to ensure the reliability of the data. Macro International followed best-practice protocols that ensured appropriate interviewing and quality data collection. Moreover, Macro International developed weights to adjust for various factors that could, if left unadjusted, introduce bias into the estimates. Various adjustments were made to address the design of the survey (which sub-sampled hospital service areas), non-response (where individuals in certain groups were more or less willing or able to participate in the study), and under-coverage (including an adjustment for those without telephones).<sup>7</sup> Technical assistance was provided by the Robert Wood Johnson Foundation through the Alpha Center for review of important decisions regarding these methods.



### *Precision of the Numbers in This Report:*

Because not every resident is surveyed, the numbers produced using survey data are estimates of the true values. Thus a survey cannot tell you what the exact insurance rate (or any other measure of interest) is. The standard error, which is based on the characteristics of the survey and how willing different individuals are to respond to the survey, as well as various other factors, can be used to estimate a range in which the true uninsurance rate (or other characteristics of interest) falls. In order to develop a range within which you are 95 percent confident the true estimate lies, you multiply the standard error times 1.96. The product is then added to the estimate to compute the high end of the range or subtracted from the estimate to develop the low end of the range.

The wider this range is, the more care needs to be taken in using the information to understand differences in certain measurable characteristics between different areas and different groups in the state. While much of the narrative in this report refers to graphs, tables which include both the estimates used in the graphs as well as the standard errors used in assessing differences in the state, are included for review. In this report, where comparisons are made across different groups of New Hampshire residents, 95 percent confidence intervals (margins within which we are 95 percent certain that the true rate of interest will fall) are used.

## *Endnotes*

<sup>1</sup> The numbers used to produce this graph are in the appendix labeled A-1. Numbers for Figure 2 will be labeled A-2; Figure 3 A-3 and so forth. Percents may not total to 100% due to rounding. Percents in graphs may be slightly different from those in tables due to rounding.

<sup>2</sup> Consistent with other states' experience conducting their own surveys, the estimate of the uninsurance rate from the NH-HICAS is both lower, and more precise, than those produced using data from the Census Bureau's Current Population Survey Data. Though there are a number of potential explanations for why the estimate from the NH-HICAS is lower than that based on the CPS, it is likely driven by differences in the questions about health insurance that were asked.

<sup>3</sup> The number of individuals who are uninsured is computed by multiplying the estimate of current uninsurance in New Hampshire times population figures provided by the New Hampshire Office of State Planning. Numbers provided in the remainder of this document (but not percentages) are based on this computation. Please note that there are margins of error associated with each percentage used to develop estimates of numbers of individuals. See the discussion of margins of error in the methods section.

<sup>4</sup> Because \$10 goes a lot farther when there's only one person in a family than for a family of three, individuals are classified based on family income relative to poverty guidelines that account for family size. Table A in the appendix provides the federal poverty guidelines for individuals living in a family with three people. These figures were used to group individuals into categories noting individuals living in families with incomes less than or equal to 200, 201-300, 301-400 and 400 plus percent of the federal poverty level.

<sup>5</sup> Hospital service areas are based on inpatient utilization data. Each hospital in the state has a non-overlapping market area that includes all towns in which a given hospital has the most admissions of any hospital in New Hampshire. Please contact the Department of Health and Human Services for a listing of each town in a hospital service area.

<sup>6</sup> For more information on response rates, please contact the Department of Health and Human Services. The response rate provided represents the number of families who responded to the survey as a percent of all those families who were eligible to be interviewed.

<sup>7</sup> Weights were developed which adjusted for age, sex, and race and ethnicity and the under-coverage associated with the fact that the survey was a telephone survey and missed households without telephones.

Table A

**Poverty Level Guidelines \***  
(Income Guidelines as Published in the Federal Register on March 18, 1999)

Annual Guidelines				
Family Size	200%	250%	300%	400%
3	\$27,760.00	\$34,700.00	\$41,640.00	\$55,520.00

Table A-1 and Table A-3

**Distribution of Health Insurance Coverage in New Hampshire**  
**New Hampshire Health Insurance Coverage and Access Survey, 1999\***

	Private Insurance		Public Insurance		Other Insurance		Uninsured	
	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err
Statewide	83.7%	0.63%	7.0%	0.45%	0.0%	0.01%	9.3%	0.43%
North Country	<b>76.3%</b>	1.19%	<b>9.6%</b>	0.70%	0.1%	0.04%	<b>14.0%</b>	0.82%
Central Western	81.6%	1.83%	6.6%	0.73%	0.0%	0.03%	11.8%	1.68%
Central	84.9%	1.12%	6.1%	0.67%	0.0%	0.02%	9.1%	0.87%
Central Eastern	<b>75.8%</b>	2.10%	<b>12.2%</b>	2.04%	0.1%	0.11%	<b>12.6%</b>	0.87%
Southwest	85.8%	1.66%	6.4%	1.25%	0.0%	0.01%	8.5%	1.09%
Seacoast	86.0%	1.04%	6.2%	0.68%	0.0%	0.00%	7.8%	0.75%

Table A-4

**The Distribution of the Currently Uninsured by Hospital Service Area**  
**New Hampshire Health Insurance Coverage and Access Survey, 1999\***

	<i>For the Currently Uninsured</i>	
	Estimate	Std Err
North Country	6.5%	0.5%
Central Western	8.6%	1.3%
Central Eastern	13.9%	1.0%
South Central	23.1%	2.0%
Southwest	21.1%	2.3%
Seacoast	26.8%	2.2%

\* Numbers in bold indicate where values were tested and found to be statistically different from statewide estimates.

Table A-5

**The Distribution of the Currently Uninsured by Hospital Service Area  
New Hampshire Health Insurance Coverage and Access Survey, 1999\***

<i>Hospital Service Area</i>	<i>For the Currently Uninsured</i>	
	Estimate	Std Err
Lebanon	3.3%	0.47%
Concord	8.6%	1.26%
Manchester	14.6%	1.68%
Nashua	12.4%	2.21%
Lakes Region	5.9%	0.78%
Dover	3.9%	0.69%
Cheshire	3.8%	0.78%
Exeter	4.3%	1.01%
Portsmouth	4.8%	1.68%
Rochester	5.0%	0.67%
Valley Regional	4.3%	1.19%
Androscoggin	1.4%	0.22%
Peterborough	4.9%	0.88%
Littleton	3.0%	0.26%
Wolfeboro	3.2%	0.33%
Derry	5.0%	0.95%
Weeks	0.9%	0.15%
Franklin	0.8%	0.11%
Plymouth	1.7%	0.20%
New London	1.1%	0.17%
Conway	2.3%	0.25%
Haverhill	0.6%	0.06%
Upper Connecticut	0.7%	0.08%
Mass Border	3.8%	0.78%

Table A-6

**Health Insurance Coverage by Age\***

	Private Insurance		Public Insurance		Other Insurance		Uninsured	
	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err
Children	<b>77.6%</b>	1.2%	<b>13.7%</b>	1.1%	0.0%	0.0%	8.4%	0.7%
Adults, 18-29	81.9%	1.4%	<b>4.1%</b>	0.6%	0.0%	0.0%	<b>13.9%</b>	1.2%
Adults, 30-44	<b>87.0%</b>	0.9%	<b>3.1%</b>	0.5%	0.0%	0.0%	9.9%	0.5%
Adults, 45-64	<b>87.6%</b>	1.0%	5.9%	0.9%	0.0%	0.0%	<b>6.5%</b>	0.5%
Total	83.7%	0.6%	7.0%	0.5%	0.0%	0.0%	9.3%	0.4%

\* Numbers in bold indicate where values were tested and found to be statistically different from statewide estimates.

Table A-7

## Distribution of Currently Uninsured by Age\*

	<i>For the Currently Uninsured</i>	
	Percent of Total	Std Err
Age < 18	25.7%	1.60%
Ages 18-29	25.5%	1.83%
Ages 30-44	31.5%	1.96%
Ages 45 – 64	17.4%	1.42%

Table A-8

## Health Insurance Coverage by Income\*

	Private Insurance		Public Insurance		Other Insurance		Uninsured	
	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err
Income < = 200 % of FPL	<b>58.8%</b>	1.8%	<b>22.4%</b>	1.6%	0.0%	0.0%	<b>19.8%</b>	1.2%
Income 201 - 300 % of FPL	85.9%	1.1%	4.3%	0.6%	0.1%	0.1%	9.9%	0.9%
Income 301-400 % of FPL	90.2%	1.2%	3.9%	0.7%	0.0%	0.0%	5.9%	1.0%
Income 400% + of FPL	93.4%	0.6%	1.6%	0.2%	0.0%	0.0%	5.0%	0.5%

Table A-9

## Health Insurance Coverage by Adult Status and Income\*

	Private Insurance		Public Insurance		Other Insurance		Uninsured	
	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err	% of Tot	Std Err
Children, Income < = 200% of FPL	<b>49.9%</b>	2.7%	<b>35.0%</b>	2.8%	0.2%	0.2%	<b>15.0%</b>	1.8%
Adults, Income < = 200% of FPL	<b>62.3%</b>	0.2%	<b>15.1%</b>	1.9%	0.0%	0.0%	<b>22.6%</b>	1.4%
Children, Income > 200%	88.5%	0.9%	5.6%	0.6%	0.0%	0.0%	5.8%	0.6%
Adults, Income > 200%	91.5%	0.5%	1.8%	0.2%	0.0%	0.0%	6.6%	0.5%

\* Numbers in bold indicate where values were tested and found to be statistically different from statewide estimates.

Table A-10

**The Distribution of the Currently Uninsured by Family Income\***

<i>Uninsured by Income</i>	<i>For the Currently Uninsured</i>	
	Percent of Total	Std Err
< 200% of Poverty	45.6%	2.4%
201-300% of Poverty	20.5%	1.7%
301-400% of Poverty	12.0%	1.9%
More than 400% of Poverty	21.9%	2.0%

Table A-11

**Family Work Status of the Currently Uninsured\***

	<i>For the Currently Uninsured</i>	
	Estimate	Std Err
At least one full time worker	72.3%	2.34%
At least one part time worker	12.1%	1.68%
Worker : Unknown Hours	2.0%	0.53%
No one in Family Working	13.2%	0.37%
No Response	0.4%	0.32%

Table A-12

**Employer Offer of Insurance for the Working Uninsured\***

	<i>For Currently Uninsured Working Adults</i>	
	Estimate	Std Err
Not Offered	57.9%	2.46%
Employer offers but ineligible	17.7%	2.02%
Employer offers, but costs too much	13.0%	1.55%
Employer offers, other reason for non-participation	4.9%	1.11%
No Response	6.4%	1.17%

\* Numbers in bold indicate where values were tested and found to be statistically different from statewide estimates.

Table A-13

Distribution of Uninsured Children by Income\*

	<i>For Uninsured Children</i>	
	Estimate	Std Err
Family Income < = 300 % of the Federal Poverty Level	74.3%	3.08%
Family Income > 300 % of the Federal Poverty Level	25.7%	3.08%

Table A-14

Distribution of Uninsured Adults by Income\*

	<i>For Uninsured Adults</i>	
	Estimate	Std Err
Family Income < = 300 % of the Federal Poverty Level	44.8%	2.42%
Family Income > 300 % of the Federal Poverty Level	55.2%	2.42%

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